Calculating Profitability

By

James D. Cotterman

Copyright © 2011-2014, Altman Weil, Inc., Newtown Square, PA, USA
All rights for further publication or reproduction reserved.

All $2,000,000 practices are worth the same. Would you accept this proposition? Many compensation decisions operate with this simple convention. Client acceptance and pricing of legal services often begin with this premise. Yet we all understand that this is a gross simplification of reality.

Why accept this proposition? Several reasons come to mind. For new law firms such simplicity is generally rooted in a shared philosophy and similar practices/clients. For these firms the economics and operating style of one practice versus another (within each firm) are not significant enough to warrant closer examination. Another reason is the collegial nature of law firm partnerships. Scrutiny of each practice and client can be a divisive issue. In addition, law firm partners generally are not well schooled in finance and accounting, so delving into cost allocations is outside their comfort zone. Finally, for many years the accounting systems and personnel in law firms were not robust and experienced enough to undertake this analysis.

Much changes with the passage of time. New law firms mature. Individual practices travel different paths resulting many years later in quite different economics. Law firms grow (lateral hiring has accelerated this aspect), adding new partners, practices and clients. Each addition adds and blends into the law firm. How well these additions fit together are important strategic, cultural and financial considerations. Now the profession has sophisticated financial tools and expert financial staffs to develop and analyze metrics. Moreover, the post-recession legal market brought increased competition among lawyers/firms and clients who are more aggressive in seeking discounts and/or alternate pricing methods.

Understanding profitability will affect law firms in many ways. It will affect hiring and retention of personnel and the selection and retention of clients. It will affect promotion and compensation decisions. It will affect engagement pricing. It will affect the delivery of legal services with the underlying premise of efficiency likely becoming as important a consideration as quality and speed of service.

If you are just getting started in profitability analysis then I recommend that you begin with the simplest tools. It is better to have something that aids decision-making than to struggle with too much theory and attempts at elegant precision. Add refinement and complexity to the analysis with experience. The following simple approach uses overall firm overhead with no sub-allocations of expenses. Some assumptions are used which will aid the reader in applying this method in their own firm. The assumptions are:

1. A single office law firm partnership with a collection of practices that are reasonably similar in their economic models.

2. Partners and associates use/share resources (offices, secretaries, technology and the like) without any significant distinction from group to group. This means that office sizes are very similar, secretarial sharing is similar across groups and that all timekeepers use a similar technology package.

3. Paralegal use/sharing of resources is about one-half that of lawyers. Thus, count each lawyer one fee-earner and each paralegal as one-half a fee-earner. This is the convention commonly found in most economic surveys of the profession.

4. Expenses include the net effect of cost advances and recoveries on the behalf of clients.

5. Compensation deductions from total expenses for determining firm overhead define compensation as salary, bonus, benefits and associated payroll taxes.

Accordingly, we can take the total expenses of the law firm and subtract the compensation costs of the employed timekeepers (generally the associates and paralegals). The remaining expenses represent the overhead of the firm. Divide this remainder by the total full-time-equivalent (FTE) fee-earners to determine the overhead per fee-earner.

Next, we deal with compensation expenses. Here, there are three assumptions for this exercise:

1. We are looking for hourly cost rates for each group of individuals—equity partners, non-equity partners, associates and paralegals—so average compensation for each group is used.

2. Compensation for development of hourly cost rates generally includes only salary, benefits and the associated payroll taxes. Including bonuses (with their associated benefit and payroll tax costs) is an option depending on your firm's particular philosophy on bonuses. A bonus paid only when an individual's

performance exceeds expected levels is properly excluded. If your firm pays a bonus for performance at or below expectations (profit sharing—not the 401(k) type, or simply a deferred salary or holdback) then at least that aspect of the bonus is rightly included in this analysis. Keep it simple and go with all or no bonuses—remember we are aiming for simplicity. History provides actual data. Current year analysis will require using the assumptions and estimates for the firm's budget.

3. A partner's compensation consists of a fair exchange for his/her labor (the portion we need) and the profits earned on the work done by others (the portion to exclude). There may also be a return on capital component depending on whether the firm pays interest on partner capital or not. Again, for simplification, we will use the partners' draw (cash plus benefits paid separately by the firm) as a proxy for the fair exchange portion we are interested in for our purposes. The likely result is excluding from 25% to 40% of a partner's compensation from this analysis. Other proxies could be substituted include extending the lock-step associate pay scale into the partner ranks or using an outside reference point such as a senior in-house lawyer.

We now have the total average cost of each group to include 1) allocated overhead, 2) base pay, 3) planned bonuses and 4) benefits and taxes. Divide the total average cost by the expected billable hours to obtain an hourly cost rate. Divide that rate by the expected realization factor for the group to obtain a required internal hourly rate. This is the lowest breakeven rate after considering revenue leakage (discussed later). Divide by an expected profit margin to obtain a target billing rate. A sample calculation follows.

	Total	Equity	Non-equity	Associates	Paralegals
Firm-wide					
Total expenses	$36,801,000				
Less lawyer compensation	$15,249,000				
Less paralegal compensation	$1,752,000				
Firm overhead	$19,800,000				
Total FTE timekeepers		50.00	25.00	45.00	24.00
Total FTE fee-earners	132.00	50.00	25.00	45.00	12.00
Overhead per fee earner	$150,000				
Per individual group					
Allocated overhead		$150,000	$150,000	$150,000	$75,000
Salary/Draw		$500,000	$250,000	$115,000	$60,000
Planned performance bonus		$0	$25,000	$6,000	$0
Benefits and taxes		$0	$49,500	$14,500	$9,500
Total cost before any additional bonuses		$650,000	$474,500	$285,500	$144,500
Expected billable hours		1,700	1,550	1,750	1,450
Cost rate		**$382**	**$306**	**$163**	**$100**
Expected realization		88%	86%	82%	80%
Required Internal hourly rate		**$434**	**$356**	**$199**	**$125**
Expected profit margin		10%	15%	22%	34%
Expected profit		$72,200	$83,700	$80,500	$74,400
Target billing rate		**$485**	**$420**	**$255**	**$190**

The sample calculation tells the user that for the firm to cover its costs it must net $163 per hour on an average associate. To account for revenue leaks it must set the average associate rate no lower than $199 per hour. Finally, if the firm wants to earn a profit on the associate it must set an even higher rate. With the average associate yielding a 22% profit margin, that rate is $255 per hour.

The underlying data for the above sample calculations are averages from publicly available surveys. To prove the analysis, we compared the calculated target billing rates to the survey data for standard billing rates. They matched within rounding conventions.

This approach can be refined in a number of ways, while preserving much of its simplicity. The first is to weight the allocation of general overhead differently. Some firms may decide that partners absorb a greater proportion of the overhead than associates do. For example, a firm may assign an equity partner a fee-earner equivalency of say 1.50, non-equity partners 1.25, senior associates 1.0, junior associates 0.75 and paralegals remaining 0.50. The variations on this theme are vast. What is important is a sense that the allocation reasonably reflects reality.

The next refinement is to sub-divide the very broad groupings of equity and non-equity partners, associates and paralegals by practice area. General overhead would remain the same. However, compensation levels and billable hour expectations would likely vary affecting the resulting hourly rates.

Another refinement could be to divide the associates by class year or class groupings (first and second years, third and fourth years and so on). Each of these refinements yields more tailored information. Finally, it is possible to create an internal rate calculation for each timekeeper. In such cases, the compensation and billable hour expectations are unique to a single person, while the allocated overhead is the common number shared by all.

Many firms will choose to combine their approaches. At the partner level, where compensation differences are often quite significant, setting individual cost rates makes a great deal of sense. Concurrently the firm may obtain reasonably useful data using class year or some lesser distinction at the associate level.

Some firms will take the rapidly evolving role of secretaries out of general overhead and apportion them more directly based on what that firm is doing in this area. Such special allocations will reflect the vastly different use of legal secretaries by age cohort and practice specialty.

Multi-office firms will probably want to allocate office specific costs directly. In those instances, it is necessary to divide the main office into its operations unit and its administrative services unit. Administrative services are those activities (human resources, finance, technology and the like) that serve the entire firm along with their associated housing costs. These costs are allocated across all timekeepers firm wide.

It may be appropriate to briefly state that it is possible to devise a cost accounting system so detailed as to take any activity and assign it to multiple cost centers—each of the aforementioned sub-groups. The account numbering schematic for such a system would be quite complex, as would the coding and verification tasks. We will forgo the obvious political challenges involved in selling such a complex system. Therefore, while precision is a possibility, it is largely not a practical approach.

Once the cost rates are settled, one can move on to allocating costs. This requires applying the appropriate cost rates to each timekeeper and allowing the financial software to flow costs throughout the system (timekeeper, class, timekeeper status, task, matter, matter type, client, client industry, practice area, department and office). The cost rates will follow the recorded hours based on the coding profiles established when a matter is opened and when time is recorded.

If your timekeepers are disciplined time recorders, it is possible to learn much about how legal services are delivered—from leverage employed to costs incurred to timing of tasks to variability of results. This information (accurate hourly histories and reasoned cost data) can help you to price non-hourly projects.

In some firms, the timekeepers do not record time well or perhaps not at all. In these instances, it may be necessary to allocate costs to an assigned practice area, office or billing lawyer, depending on how your firm is organized. Thus, cost rates on an hourly basis are not used. The ability to look at client and matter profitability is lost, but overall portfolios, practice areas and office data may still be relevant.

Profitability can then be determined by comparing the fee receipts to the costs assigned under each tracking category—timekeeper, class, matter, client, practice area and the like. I have avoided getting into accounting technicalities, but here it is important to discuss cash and accrual basis accounting. Law firms primarily operate as cash businesses. Revenues are reported as cash is collected and expenses are recognized as cash is disbursed[1].

Remember that the cost rates developed earlier are based on expected billable time recorded. Thus, the best match of expenses to revenues is to let the cost rates flow from recorded billable hours.

	Total	Equity	Non-equity	Associates	Paralegals
Fee collections	$125,033	$21,453	$36,006	$52,326	$15,249
Allocated Expenses					
Cost rate	**$201**	**$382**	**$306**	**$163**	**$100**
Hours	500	50	100	250	100
Allocated cost of services rendered	$100,482	$19,118	$30,613	$40,786	$9,966
Profit before carrying costs	$24,551	$2,335	$5,393	$11,540	$5,283
Margin before carrying costs	19.6%	10.9%	15.0%	22.1%	34.6%

This very simple approach to examining profitability does not isolate important factors that affect how well your firm is operating. The first is the propensity to discount price. It is the most common pricing adjustment requested by clients. The second is the efficiency at delivering services. Much discussion is under way in the profession about legal project management and the write-downs that occur before billing as well as client perceptions of value and the write-offs of accounts receivable after billing. The third is how long it takes to bill a client. The fourth is how long it takes the client to pay. Because of this, critical information may be overlooked or misunderstood.

The first three factors are revenue leaks that are critically important to profitability. The illustration that follows depicts what is really happening at each stage beginning with the actual time worked versus the time recorded. It is an elusive metric as it represents

[1] Let us set aside fixed assets and depreciation, clients costs that are supposed to be capitalized, bank borrowings, debt repayment, capital contributions, the return of capital, the year-end pension accrual that is paid in the following year and other minor distortions of pure cash basis accounting.

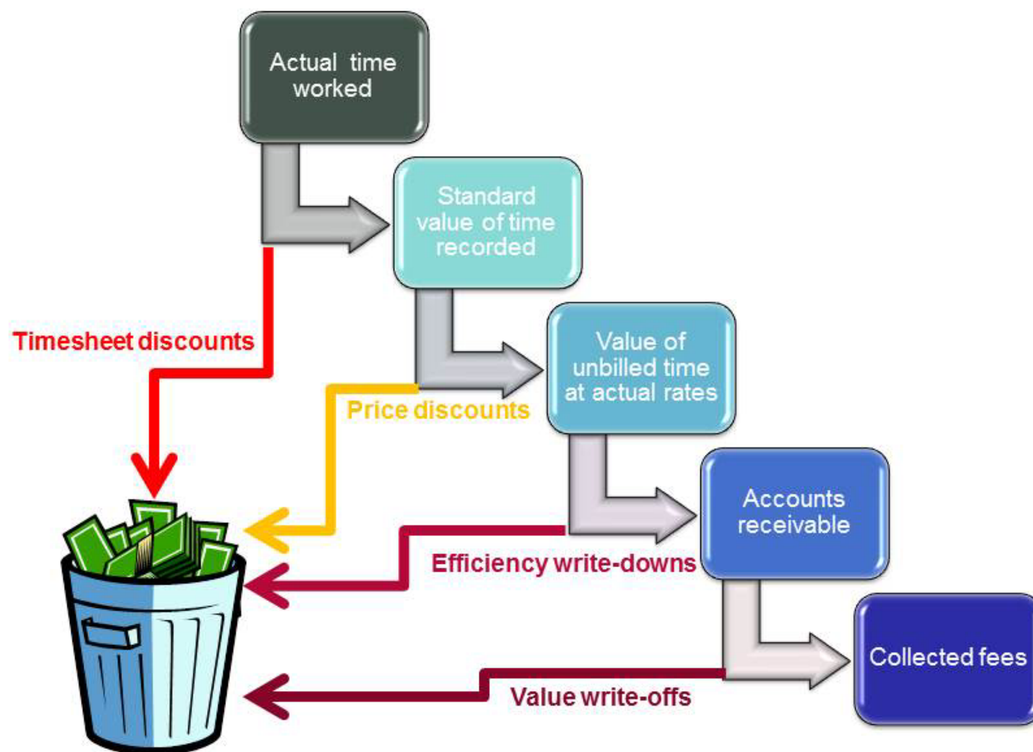
individual timekeeper decisions regarding what is and is not appropriate to record. Some of this reflects admonitions from supervising partners, some from unease at showing inefficiency, some because of poor time capture habits. Yet, it is an important metric to understand and manage.

Next, we look at the individual components of a common profitability metric – realization. It is better to look at each component – that is where the real work occurs to understand and correct problems. We begin with the standard value of time recorded and the discounts granted to yield the value of time recorded at actual rates. The discounts represent pricing variances.

The firm's unbilled time reports reflect these actual rate amounts. The relief of unbilled time sends billed time into accounts receivable and billing adjustments for inefficiencies, staffing decisions and the like to the trash.

Accounts receivable is relieved when cash is collected or accounts are written-off.

Revenue Leakage



Let us convert this conceptual framework into the following sample revenue statement. The data is from the financial system. The revenue statement begins with standard value of time for the hours recorded and proceeds as above. However, in this format the financial impact at each stage is evident.

	Total	Equity	Non-equity	Associates	Paralegals
Revenue					
Number of timekeepers	**5.0**	**1.0**	**0.5**	**2.5**	**1.0**
Hours	500	50	100	250	100
Standard rate	$298	$485	$420	$255	$190
Standard value of time	$149,000	$24,250	$42,000	$63,750	$19,000
Pricing variance (discounts)	-5.0%	-5.0%	-5.0%	-5.0%	-5.0%
Actual rates used	$283	$461	$399	$242	$181
Pricing realization	**95.0%**	**95.0%**	**95.0%**	**95.0%**	**95.0%**
Time value at actual rates	$141,550	$23,038	$39,900	$60,563	$18,050
Efficiency adjustments	($11,307)	($691)	($2,394)	($6,056)	($2,166)
Billing realization of actual rates	**92.0%**	**97.0%**	**94.00%**	**90.00%**	**88.00%**
Billings	$130,243	$22,346	$37,506	$54,506	$15,884
AR write-offs	($5,210)	($894)	($1,500)	($2,180)	($635)
Collection realization of billings	**96.0%**	**96.0%**	**96.0%**	**96.0%**	**96.0%**
Fee collections	$125,033	$21,453	$36,006	$52,326	$15,249
Overall realization of standard rates	**83.9%**	**88.5%**	**85.7%**	**82.1%**	**80.3%**

Remember that the cost rates developed earlier in the article are based on expected billable time recorded. Thus, the best match of expenses to revenues is to let the cost rates flow from recorded billable hours.

We previously mentioned the timeliness of billing and collection efforts as important, yet often un-accounted for factors in assessing profitability. The speed at which billable time is converted into a bill and the bill is paid affects the working capital requirements for the firm. Firms may borrow the funds to carry this investment, resulting in ongoing interest payments. Alternatively, the partners can invest additional capital to carry this burden, for which they should be compensated. All capital comes with a cost for its use. In the following example, we used the Aaa corporate bond rate as a proxy for the cost of capital. Firms may use their line of credit rate, their banks prime rate or some other relevant rate.

Time value at actual rates	$141,550
Cost of capital (Aaa corporate bond rate)	4.38%
Weeks carried before billing	7
Carrying costs of WIP	**$775**
Billings	$130,243
Cost of capital (Aaa corporate bond rate)	4.38%
Weeks carried before collection	13
Carrying costs of AR	**$1,426**
Total carrying costs	**$2,201**

Now, let us summarize all of this information as follows.

Revenue	
Standard value	$149,000
Pricing variance (discounts)	($7,450)
Efficiency adjustments	($11,307)
AR write-offs	($5,210)
Net revenue	$125,033
Allocated Expenses	
Compensation and overhead	$100,482
Carrying costs	$2,201
Total costs	$102,683
Contribution	$22,350
Contribution margin	15%

It is important to return to the beginning and remember that these efforts are designed to provide reasonable information upon which better decisions can be reached regarding how the firm prices, manages and delivers legal services. This also provides greater accountability for how well each partner manages his/her practice. This information is not absolute, nor is it without some distortion. However, it does provide a solid foundation.

About the author:

James D. Cotterman is a principal of Altman Weil, Inc., a legal management consultancy headquartered in suburban Philadelphia. Contact Mr. Cotterman at 407-381-2426 or email jdcotterman@altmanweil.com.